IN THE ABSTRACT:

To decrease A method for decreasing the streak artifact in the reconstructed image due to the existence of foreign matter of high X-ray absorption rate such as metals, metals. the The method includes separating discrete region containing the data having abrupt change of value is separated from the projection data in the sequential order of radiographic detector elements, transforming the data is transformed to continuous data such that the value gradually smoothly changes (step ST2), then only filtering the continuous data is filtered (step ST3), thus composing the filtered data is composed with the data of the discrete regions to form the projection data used for the image reconstruction (step ST4).